AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1.   (Canceled)

2.   (Currently Amended) The method of Claim [[38]] 40, wherein the first set of rules causes the ~~transmitting peer entity~~ radio access network to send the polling request when a last Protocol Data Unit (PDU) in a transmission buffer is transmitted.

3.   (Currently Amended) The method of Claim [[38]] 40, wherein the first set of rules causes the ~~transmitting peer entity~~ radio access network to send the polling request when the status report has not been received by the ~~transmitting peer entity~~ radio access network and a polling timer has timed out.

4.   (Currently Amended) The method of Claim [[38]] 40, wherein the first set of rules causes the ~~transmitting peer entity~~ radio access network to send the polling request when the ~~transmitting peer entity~~ radio access network has transmitted a predefined number of Protocol Data Units (PDUs).

5.   (Currently Amended) The method of Claim [[38]] 40, wherein the first set of rules causes the ~~transmitting peer entity~~ radio access network to send the polling request when the ~~transmitting peer entity~~ radio access network has transmitted a predefined number of Service Data Units (SDUs).

6.   (Currently Amended) The method of Claim [[38]] 40, wherein the first set of rules causes the ~~transmitting peer entity~~ radio access network to send the polling request when the ~~transmitting peer entity~~ radio access network has transmitted during a predefined portion of a transmitting window.

Amendment - PAGE 2 of 17
EUS/J/P/04-8660

7.   (Currently Amended) The method of Claim [[38]] 40, wherein the first set of rules causes the ~~transmitting peer entity~~ radio access network to send the polling request when the ~~transmitting peer entity~~ radio access network has transmitted during a predefined period of time.

8.   (Currently Amended) The method of Claim [[38]] 40, wherein the first set of rules causes the ~~transmitting peer entity~~ radio access network to defer sending the polling request for a predefined period of time.

9.   (Currently Amended) The method of Claim [[38]] 40, further comprising adjusting by the ~~transmitting peer entity~~ radio access network, a transmission window parameter in response to receiving the status report.

10.   (Currently Amended) The method of Claim [[38]] 40, further comprising retransmitting by the ~~transmitting peer entity~~ radio access network, at least one Protocol Data Unit (PDU) responsive to receiving said status report.

11.   (Currently Amended) The method of Claim [[38]] 40, further comprising the steps of:

determining by the ~~transmitting peer entity~~ radio access network whether the status report sent by the ~~receiving peer entity~~ mobile station is plausible; and

retransmitting by the ~~transmitting peer entity~~ radio access network, at least one Protocol Data Unit (PDU) in response to determining that the status report is plausible.

12.   (Currently Amended) The method of Claim [[38]] 40, wherein the second set of rules causes the ~~receiving peer entity~~ mobile station to transmit the status report to the ~~transmitting peer entity~~ radio access network if an estimated Protocol Data Unit (PDU) counter is not counting, and causes the ~~receiving peer entity~~ mobile station to not send the status report to the ~~transmitting peer entity~~ radio access network if the estimated PDU counter is counting.

Amendment - PAGE 3 of 17
EUS/J/P/04-8660

13. (Currently Amended) The method of Claim [[38]] 40, wherein the second set of rules causes the ~~receiving peer entity~~ mobile station to transmit the status report to the ~~transmitting peer entity~~ radio access network if the ~~receiving peer entity~~ mobile station detects at least one missing or incorrectly received Protocol Data Unit (PDU).

14. (Currently Amended) The method of Claim [[38]] 40, wherein the second set of rules causes the ~~receiving peer entity~~ mobile station to transmit the status report to the ~~transmitting peer entity~~ radio access network when a predefined number of Protocol Data Units (PDUs) is received.

15. (Currently Amended) The method of Claim [[38]] 40, wherein the second set of rules causes the ~~receiving peer entity~~ mobile station to transmit the status report to the ~~transmitting peer entity~~ radio access network when a predefined number of Service Data Units (SDUs) is received.

16. (Currently Amended) The method of Claim [[38]] 40, wherein the second set of rules causes the receiving peer entity mobile station to transmit the status report to the ~~transmitting peer entity~~ radio access network in response to receiving the polling request.

17. (Currently Amended) The method of Claim [[38]] 40, wherein the second set of rules causes the ~~receiving peer entity~~ mobile station to transmit the status report to the ~~transmitting peer entity~~ radio access network when the ~~transmitting peer entity~~ radio access network has transmitted during a predefined portion of a transmitting window.

18. (Currently Amended) The method of Claim [[38]] 40, wherein the second set of rules causes the ~~receiving peer entity~~ mobile station to send the status report to the ~~transmitting peer entity~~ radio access network during a predefined period of time.

Amendment - PAGE 4 of 17
EUS/J/P/04-8660

19.   (Currently Amended) The method of Claim [[38]] 40, wherein the second set of rules causes the ~~receiving peer entity~~ mobile station to defer sending the status report for a predefined period of time.

20.   (Canceled)

21.   (Currently Amended) The system of Claim [[39]] 42, wherein the signaling means in the ~~transmitting peer entity~~ radio access network sends the polling request when a last Protocol Data Unit (PDU) in a transmission buffer is transmitted.

22.   (Currently Amended) The system of Claim [[39]] 42, wherein the signaling means in the ~~transmitting peer entity~~ radio access network sends the polling request when the status report has not been received by the ~~transmitting peer entity~~ radio access network and a polling timer has timed out.

23.   (Currently Amended) The system of Claim [[39]] 42, wherein the signaling means in the ~~transmitting peer entity~~ radio access network sends the polling request when the ~~transmitting peer entity~~ radio access network has transmitted a predefined number of Protocol Data Units (PDUs).

24.   (Currently Amended) The system of Claim [[39]] 42, wherein the signaling means in the ~~transmitting peer entity~~ radio access network sends the polling request when the ~~transmitting peer entity~~ radio access network has transmitted a predefined number of Service Data Units (SDUs).

25.   (Currently Amended) The system of Claim [[39]] 42, wherein the signaling means in the ~~transmitting peer entity~~ radio access network sends the polling request when the ~~transmitting peer entity~~ radio access network has transmitted during a predefined portion of a transmitting window.

26. (Currently Amended) The system of Claim [[39]] 42, wherein the signaling means in the ~~transmitting peer entity~~ radio access network sends the polling request when the ~~transmitting peer entity~~ radio access network has transmitted during a predefined period of time.

27. (Currently Amended) The system of Claim [[39]] 42, wherein the signaling means in the ~~transmitting peer entity~~ radio access network defers sending the polling request for a predefined period of time.

28. (Currently Amended) The system of Claim [[39]] 42, wherein the ~~transmitting peer entity~~ radio access network also includes means for adjusting a transmission window parameter in response to receiving the status report.

29. (Currently Amended) The system of Claim [[39]] 42, wherein the ~~transmitting peer entity~~ radio access network also includes means for retransmitting at least one Protocol Data Unit (PDU) in response to receiving the status report.

30. (Currently Amended) The system of Claim [[39]] 42, wherein the ~~transmitting peer entity~~ radio access network also includes:
means for determining whether the status report sent by the ~~receiving peer entity~~ mobile station is plausible; and
means for retransmitting at least one Protocol Data Unit (PDU) in response to determining that the status report is plausible.

31. (Currently Amended) The system of Claim [[39]] 42, wherein the signaling means in the ~~receiving peer entity~~ mobile station sends the status report to the ~~transmitting peer entity~~ radio access network if an estimated Protocol Data Unit (PDU) counter is not counting, and does not send the status report to the ~~transmitting peer entity~~ radio access network if the estimated PDU counter is counting.

Amendment - PAGE 6 of 17
EUS/J/P/04-8660

32. (Currently Amended) The system of Claim [[39]] 42, wherein the signaling means in the ~~receiving peer entity~~ mobile station sends the status report to the ~~transmitting peer entity~~ radio access network if the ~~receiving peer entity~~ mobile station detects at least one missing or incorrectly received Protocol Data Unit (PDU).

33. (Currently Amended) The system of Claim [[39]] 42, wherein the signaling means in the ~~receiving peer entity~~ mobile station sends the status report to the ~~transmitting peer entity~~ radio access network when a predefined number of Protocol Data Units (PDUs) is received.

34. (Currently Amended) The system of Claim [[39]] 42, wherein the signaling means in the ~~receiving peer entity~~ mobile station sends the status report to the ~~transmitting peer entity~~ radio access network when a predefined number of Service Data Units (SDUs) is received.

35. (Currently Amended) The system of Claim [[39]] 42, wherein the signaling means in the ~~receiving peer entity~~ mobile station sends the status report to the ~~transmitting peer entity~~ radio access network when the ~~transmitting peer entity~~ radio access network has transmitted during a predefined portion of a transmitting window.

36. (Currently Amended) The system of Claim [[39]] 42, wherein the signaling means in the ~~receiving peer entity~~ mobile station sends the status report during a predefined period of time.

37. (Currently Amended) The system of Claim [[39]] 42, wherein the signaling means in the ~~receiving peer entity~~ mobile station defers sending the status report for a predefined period of time.

38-39. (Canceled)

40.   (New) In a mobile radio communication system, a method of implementing a flexible radio link protocol (RLP) that enables transmission of data between a radio access network and a mobile station when operating with a plurality of data transmission modes, wherein each of said data transmission modes has an associated set of rules for transmitting data, said method comprising the steps of:

informing the radio access network and the mobile station of a specific data transmission mode to be utilized for delivery of data between the radio access network and the mobile station;

determining by the radio access network, a first set of rules corresponding to the specific data transmission mode, said first set of rules governing whether the radio access network should send polling requests to the mobile station, and if so, how and/or when the polling requests should be sent;

upon determining that the radio access network should send polling requests to the mobile station, sending a polling request from the radio access network to the mobile station in accordance with the first set of rules;

determining by the mobile station, a second set of rules corresponding to the specific data transmission mode, said second set of rules governing whether the mobile station should send status reports to the radio access network in response to receiving one or more polling requests, and if so, how and/or when the status reports should be sent; and

upon determining that the mobile station should send status reports to the radio access network, sending a status report from the mobile station to the radio access network in accordance with the second set of rules.

41.   (New) The method of Claim 40 wherein the plurality of data transmission modes includes transparent data transfer, unacknowledged data transfer, and acknowledged data transfer.

42.   (New) In a mobile radio communication network, a system for implementing a flexible radio link protocol (RLP) that enables transmission of data between a radio access network and a mobile station when operating with a plurality of data transmission modes, wherein each of said data transmission modes has an associated set of rules for transmitting data, said system comprising:

means for informing the radio access network and the mobile station of a specific data transmission mode to be utilized for delivery of data between the radio access network and the mobile station;

means within the radio access network for selecting a first set of rules corresponding to the specific data transmission mode, said first set of rules governing whether the radio access network should send polling requests to the mobile station, and if so, how and/or when the polling requests should be sent;

signaling means in the radio access network for sending a polling request from the radio access network to the mobile station in accordance with the first set of rules;

means within the mobile station for selecting a second set of rules corresponding to the specific data transmission mode, said second set of rules governing whether the mobile station should send status reports to the radio access network in response to receiving one or more polling requests, and if so, how and/or when the status reports should be sent; and

signaling means in the mobile station for sending a status report from the mobile station to the radio access network in accordance with the second set of rules.

43.   (New) In a mobile radio communication system, a method of implementing a flexible radio link protocol (RLP) that enables transmission of data between a mobile station and a radio access network when operating with a plurality of data transmission modes, wherein each of said data transmission modes has an associated set of rules for transmitting data, said method comprising the steps of:

informing the mobile station and the radio access network of a specific data transmission mode to be utilized for delivery of data between the mobile station and the radio access network;

Amendment - PAGE 9 of 17
EUS/J/P/04-8660

determining by the mobile station, a first set of rules corresponding to the specific data transmission mode, said first set of rules governing whether the mobile station should send polling requests to the radio access network, and if so, how and/or when the polling requests should be sent;

upon determining that the mobile station should send polling requests to the radio access network, sending a polling request from the mobile station to the radio access network in accordance with the first set of rules;

determining by the radio access network, a second set of rules corresponding to the specific data transmission mode, said second set of rules governing whether the radio access network should send status reports to the mobile station in response to receiving one or more polling requests, and if so, how and/or when the status reports should be sent; and

upon determining that the radio access network should send status reports to the mobile station, sending a status report from the radio access network to the mobile station in accordance with the second set of rules.

44. (New) In a mobile radio communication network, a system for implementing a flexible radio link protocol (RLP) that enables transmission of data between a mobile station and a radio access network when operating with a plurality of data transmission modes, wherein each of said data transmission modes has an associated set of rules for transmitting data, said system comprising:

means for informing the mobile station and the radio access network of a specific data transmission mode to be utilized for delivery of data between the mobile station and the radio access network;

means within the mobile station for selecting a first set of rules corresponding to the specific data transmission mode, said first set of rules governing whether the mobile station should send polling requests to the radio access network, and if so, how and/or when the polling requests should be sent;

signaling means in the mobile station for sending a polling request from the mobile station to the radio access network in accordance with the first set of rules;

Amendment - PAGE 10 of 17
EUS/J/P/04-8660

means within the radio access network for selecting a second set of rules corresponding to the specific data transmission mode, said second set of rules governing whether the radio access network should send status reports to the mobile station in response to receiving one or more polling requests, and if so, how and/or when the status reports should be sent; and

signaling means in the radio access network for sending a status report from the radio access network to the mobile station in accordance with the second set of rules.

45.   (New) A radio access network for implementing a flexible radio link protocol (RLP) that enables transmission of data between the radio access network and a mobile station when operating with a plurality of data transmission modes, wherein each of said data transmission modes has an associated set of rules for transmitting data, said radio access network comprising:

means for informing the mobile station of a specific data transmission mode to be utilized for delivery of data between the radio access network and the mobile station;

means for selecting a set of rules corresponding to the specific data transmission mode, said selected set of rules governing whether the radio access network should send polling requests to the mobile station, and if so, how and/or when the polling requests should be sent; and

signaling means for sending a polling request from the radio access network to the mobile station in accordance with the selected set of rules, and for receiving status reports from the mobile station.

46.   (New) A mobile station for implementing a flexible radio link protocol (RLP) that enables transmission of data between the mobile station and a radio access network when operating with a plurality of data transmission modes, wherein each of said data transmission modes has an associated set of rules for transmitting data, said mobile station comprising:

means for informing the radio access network of a specific data transmission mode to be utilized for delivery of data between the mobile station and the radio access network;

means for selecting a set of rules corresponding to the specific data transmission mode, said selected set of rules governing whether the mobile station should send polling requests to the radio access network, and if so, how and/or when the polling requests should be sent; and

signaling means for sending a polling request from the mobile station to the radio access network in accordance with the selected set of rules, and for receiving status reports from the radio access network.

Amendment - PAGE 12 of 17
EUS/J/P/04-8660